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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,544	10/01/2003	Masatoshi Ito	11835/12	5749

7590 05/17/2005

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EXAMINER

BOTTORFF, CHRISTOPHER

ART UNIT	PAPER NUMBER
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3618

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/674,544	Applicant(s) ITO ET AL.	
	Examiner Christopher Bottorff	Art Unit 3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 2-5 and 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 6-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The amendment filed February 17, 2005 has been entered. Claims 6-12 are added. Claims 1-12 are pending.

Election/Restrictions

Newly submitted claim 12 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claim 12 defines the acts of a method while the invention originally claimed defines the physical structure of an apparatus. Moreover, the method does not require the control means defined in the apparatus claims, which control means is an electronic computing device. Rather an experienced operator actuating mechanical devices could perform the method manually.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 12 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claims 2-5 remain withdrawn for being directed to non-elected species. Claims 1 and 6-11 are under consideration.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 6-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1 recites a forward-motor-drive control means, a forward-engine-drive control means, and a mode selecting means. However, the disclosure does not describe the structure that comprises each of the means. Page 31, lines 1-4, of the specification describes a control device 60 having a CPU, RAM, and ROM. Page 33 of the specification indicates that control device 60 includes distinct structures in the form of a forward-motor-drive control means 104, forward-engine-drive control means 112, and mode determining means 114. These means are depicted in Figure 6. However, the specification fails to describe the actual distinct structures of the various means in a way that would allow one of ordinary skill in the art to make the claimed invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 6-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Since the structure that comprises of each claimed means is not described in the disclosure, the subject matter that comprises each claimed means is unclear.

Response to Arguments

Applicants' arguments filed February 17, 2005 have been fully considered. Applicants' argument that clutch 41 of Tsuzuki et al. is necessarily engaged in a motor drive mode, rather than released as claimed, is persuasive. The rejection of claim 1 in view of Tsuzuki et al has been withdrawn.

However, Applicants' arguments regarding the rejection of claim 1 under 35 U.S.C. 112 are not persuasive.

The claimed means limitations are not supported by the disclosure of hybrid control device 60 and associated control routines. Control device 60 represents only one means, while claim 1 recites three distinct means. A disclosure of the structure forming each of these three means must be provided if three distinct means are to be claimed. Although the disclosure describes control device 60 as including a CPU, RAM, and ROM, the disclosure does not suggest that the forward-motor-drive control means, forward-engine-drive control means, and mode selection means also comprise a CPU, RAM, and ROM or any other particular structure. Nor does the disclosure limit control device 60 to only including a CPU, RAM, and ROM. The disclosure only supports that the claimed means exist, and does not support the structure that comprises each of the distinct means. One skilled in the art to which the present invention pertains would not, given the present specification and process flows illustrated in the figures, be able to

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configure the claimed means without independent invention, since their respective configurations are not disclosed.

Since a single control means (control device 60) is adequately supported by the disclosure, defining a single means for controlling the system according to the recited functions would be more favorably considered. For example, the limitations:

- (g) forward-motor-drive control means for engaging said first clutch and releasing said second clutch to thereby establish a forward motor drive mode in which the automotive vehicle is driven in a forward direction by operation of said electric motor while said engine is at rest;
- (h) forward-engine-drive control means for engaging both of said first clutch and said second clutch to establish a direct engine drive mode in which the automotive vehicle is driven in the forward direction by operation of said engine, with said planetary gear device being rotated as a unit, and for releasing said first clutch and engaging said second clutch to establish an engine-and-motor drive mode in which the automotive vehicle is driven in the forward direction by operations of both of said engine and said electric motor; and
- (i) mode selecting means operable upon switching of a vehicle drive mode from said forward motor drive mode to one of said direct engine drive mode and said engine-and-motor drive mode, for determining whether said engine is likely to stall if said direct engine drive mode is established, and commanding said forward-engine-drive control means to establish said engine-and-motor drive mode, when it is determined that the engine is likely to stall if said direct engine drive mode is established.

could be replaced with:

and

- (g) means for controlling the hybrid drive system to engage said first clutch and release said second clutch to thereby establish a forward motor drive mode in which the automotive vehicle is driven in a forward direction by operation of said electric motor while said engine is at rest; to engage both of said first clutch and said second clutch to establish a direct engine drive mode in which the automotive vehicle is driven in the forward direction by operation of said engine, with said planetary gear device being rotated as a unit, and to release said first clutch and engage said second clutch to establish an engine-and-motor drive mode in which the automotive vehicle is driven in the forward direction by operations of both of said engine and said electric motor; to determine whether

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said engine is likely to stall if said direct engine drive mode is established, when it is determined that a vehicle drive mode should be switched from said forward motor drive mode to said direct engine drive mode; and to establish said engine-and-motor drive mode, when it is determined that the engine is likely to stall if said direct engine drive mode is established.

Such a modification could be made to claim 1, with appropriate amendments to claims 6 and 11.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

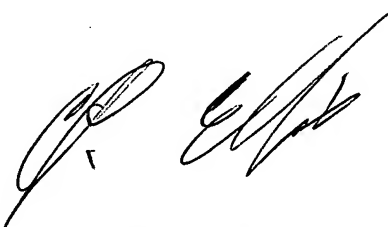
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Bottorff whose telephone number is (571) 272-6692. The examiner can normally be reached on Mon.-Fri. 7:30 a.m. - 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher Bottorff



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